REMARKS

Applicant respectfully requests the Examiner's reconsideration of the present application as amended.

Claims 1-38 are pending in the present application.

Claims 25 and 38 are rejected under 35 USC §102(e) as being anticipated by U.S. Patent Publication No. 2003/0009705 ("Thelander").

Claims 26-28 and 36 are rejected under 35 USC § 103(a) as being unpatentable over Thelander in view of U.S. Patent Publication No. 2003/0085621 ("Potega").

Claim 37 is rejected under 35 USC §103(a) as being unpatentable over Potega in view of U.S. Patent Publication No. 2004/0243376 ("Karunaratne") and U.S. Patent No. 5,600,841 ("Culbert").

Claims 1-6, 12-15, 17-20, 24, and 31-35 are allowed.

Applicant submits that claims 25-28, and 36-38 are patentable over Thelander, Potega, Karunarantne, and Culbert under 35 USC §102(e) and §103(a).

Thelander includes a disclosure of a method and system for controlling the power management profiles of computers connected through a network. The method and system monitoring the electrical power use of each computer in the network, and reports this information to an authorized party, such as the network administrator. According to the method and system, an authorized party may configure and maintain a power management profile for each computer in the network. In particular, the authorized party may individually configure and maintain a power management profile for each computer. Alternately, each computer in the network can be classified in a group, and the authorized manager can then configure and maintain a single power management profile shared by each computer in the group (Thelander Abstract).

Potega includes a disclosure of a power supply that detects power requirements of an electrical device and configures itself to provide the correct power to the device. By using a

connector that isolates the device from its battery, the power supply can provide power to the device, recharge the battery, recharge the battery while at the same time providing power to the device, or provide power to the device while preventing the battery from being recharged. A switch used with the connector creates various circuits and is controllable by the power supply, the electrical device, by signals from the electrical device, or by a third device. The power supply may provide power to a plurality of devices and may be used with other power supplies to form a power grid. A master control unit receives inputs from each of the power supplies and controls the delivery and supply of power being the power supplies (Potega Abstract).

Karunarantne includes a disclosure of a method for estimating a power requirement of a circuit design that includes steps of: (a) selecting a set of targeted Energy Arcs and/or Power Arcs, (b) creating one or more circuit states using the set of targeted Energy Arcs and/or Power Arcs, (c) back-tracing the one or more circuit states over one or more simulation clock cycles to form a start circuit state and a stimulus segment, (d) simulating the stimulus segment in forward time progression and determining which Event Arcs in Energy Arcs and/or which Condition Arcs in Power Arcs are satisfied at each stimulus clock cycle, and (e) recording data at each stimulus clock cycle that is utilized to estimate the power requirement (Karunarantne Abstract).

Culbert includes a disclosure of a method, system, and apparatus for controlling the supply of power to an I/O device attached to a General Purpose Input/Output (GPIO) circuit in a personal digital assistant (PDA). The GPIO circuit, which is responsible for supplying power to the attached I/O device, includes a pin enable circuit coupled to the power pin of the I/O device, where the pin enable circuit includes a contingency register holding a contingency bit and a power register which controls the power supply to the I/O device power pin. The contingency bit is reflective of a power supply priority of the I/O device, where the priority is determined by the type of the I/O device and whether or not the I./O device is recognized (Culbert Abstract).

Applicant submits that Thelander, Potega, Karunaratne, and Culbert fail to teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data.

The Office Action mailed 11/16/2006 states that

> Regarding claim 25, Thelander et al. disclose a power evaluation unit comprising: a data retriever unit (client service process 305) to retrieve power data (e.g.[0061) from an operating system (301) by a battery (e.g. [0061], [0083], computer 205 is operating from battery power); and a data processor unit (microcontroller) to determine a net power consumption of an application from the power data (e.g. [0060]).

(11/16/2006 Office Action, p. 2) (Emphasis Added).

On the contrary, paragraph [0061] in Thelander states that a client service process 305 monitors the desired power usage information and stores the power usage information in a power usage log maintained in the log database 311. Applicant submits that neither the client service process 305 nor the log database 311 is a battery (Thelander [0061] and Figure 3).

Furthermore, paragraph [0083] states that "a computer 205 is operating from battery power". Paragraph [0083] provides no disclosure that the battery supplies an operating system with power data.

In addition, as stated previously in the Response filed 8/29/2006, Thelander discloses power scheme settings that puts basic hardware into a standby mode, when the computer is operating from battery power. The power scheme settings are not supplied to an operating system by a battery. The power scheme settings are selected by a user (Thelander [0044], [0045], and [0083] and Figures 4 and 10). The battery described in Thelander does not supply power data to an operating system that is used to determine a net power of an application. The battery in Thelander is used only for powering a computer (Thelander [0045]). Applicant submits that "battery power" is not the same as "power data" as claimed.

Potega only discloses power supply methods an configurations. Potega does not teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data.

Karunarantne only discloses methods for estimating power requirements of circuit designs. Karunarantne does not teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data.

Culbert only discloses a method and apparatus for anticipatory power management for low power data. Culbert does not teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data.

In contrast, claim 25 states

> A power evaluation unit, comprising:
> a data retriever unit to retrieve power data supplied to an operating system by a battery; and
> a data processor unit to determine a net power consumption of an application from the power data.

(Claim 25) (Emphasis added).

Given that claims 26-28 depend from claim 25, it is likewise submitted that claims 26-28 are also patentable under 35 U.S.C. §102(e) and §103(a) over Thelander, Potega, Karunarantne, and Culbert.

Applicant further submits that Thelander, Potega, Karunaratne, and Culbert fail to teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to from an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data by integrating a drain rate of the battery over a period of time measured.

The Office Action mailed 11/16/2006 states that

> Regarding claim 38, Thelander et al. disclose a power evaluation unit comprising: a data retriever unit (client service process 305) to retrieve power data (e.g. [0061]) to form an operating system (301) by a battery (e.g. [0061], [0083], computer 205 is operating from battery power); and a data processor unit (microcontroller) to determine a net power consumption of an application from the power data (e.g. [0060]) by integrating a drain rate of the battery over the a period of time measured (e.g. Fig. 4, [0044]-[0045]).

(11/16/2006 Office Action, p. 3) (Emphasis Added).

Paragraphs [0044] and [0045] of Thelander cited by the Office are shown below.

> [0044] As may be seen in FIG. 4, when the interface tab 403 entitled "Power Schemes" is activated, the interface 401 includes a power schemes display 415 and a power scheme settings display 417. The power schemes display 415 includes a field 419, identifying the power scheme to be employed by the operating system 301 (in FIG. 4 named "Always On"), and a power scheme selection button 421. As is known in the art, when a user activates the power scheme selection button 421, the display 401 provides a drop down menu listing other available power schemes (if any), from which the user can select a power scheme to be employed by the operating system 301 in the future.
>
> [0045] The power scheme settings display 417 then includes fields 423, 425, 427, 429, 431, 433, 435, and 437 displaying the power settings for the selected power scheme. In particular, the fields 423, 425, 427 and 429 display the power management settings, according to the power scheme identified in field 419, for turning off a monitor associated with the computer 101, turning off hard disk drives 111, putting the basic hardware into a standby mode, and putting the computer into the hibernate mode, respectively, when the computer is plugged into a power source. Similarly, the fields 431, 433, 435 and 437 display the power management settings, according to the power scheme identified in field 419, for turning off a monitor associated with the computer 101, turning off hard disk drives 111, putting the basic hardware into a standby mode, and putting the computer into the hibernate mode, respectively, when the computer is operating from battery power.

(Thelander, [0044] and [0045]).

Applicant submits that paragraphs [0044] and [0045] provide no mention of integrating a drain rate of a battery over a period of time measured. In fact, Applicant submits that the entire Thelander reference appears to provide no mention of integrating or integration. Applicant respectfully requests that the Office clarify which section in Thelander it believes is pertinent to integrating a drain rate of a battery over a period of time measured.

Potega only discloses power supply methods an configurations. Potega does not teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to from an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data by integrating a drain rate of the battery over a period of time measured.

Karunarantne only discloses methods for estimating power requirements of circuit designs. Karunarantne does not teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to from an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data by integrating a drain rate of the battery over a period of time measured.

Culbert only discloses a method and apparatus for anticipatory power management for low power data. Culbert does not teach or suggest a power evaluation unit having a data retriever unit to retrieve power data supplied to from an operating system by a battery, and a data processor unit to determine a net power consumption of an application from the power data by integrating a drain rate of the battery over a period of time measured.

In contrast, Claim 38 states

> A power evaluation unit, comprising:
> a data retriever unit to retrieve power data supplied to from an operating system by a battery; and
> a data processor unit to determine a net power consumption of an application from the power data by integrating a drain rate of the battery over a period of time measured.

(Claim 38) (Emphasis Added).

Claim 36 also includes the limitation of integrating a drain rate of battery over a first time period.

Applicant further submits that Thelander, Potega, Karunaratne, and Culbert fail to teach or suggest determining a systematic error of power data, supplied to an operating system by a battery, used for identifying an amount of power used by a system running an application by determining an update granularity of the power data and dividing the update granularity of the power data by the first time period, and generating an indication to a user if the systematic error exceeds a predetermined value.

The Office Action mailed 11/16/2006 states that

> Potega fails to teach dividing the update granularity of the power data by the time period; and generating an indication to a user if the systematic error exceeds a predetermined value.
> Karunaratne teaches dividing the update of the power data by the time period (e.g. [0074]).

(11/16/2006 Office Action, pp. 5-6) (Emphasis Added).

Paragraph [0074] of Karunaratne provides the following example.

> For example and without limitation, assume that Condition Arc "B&C" or a Power Arc was satisfied 12 times, and it remained satisfied for a total of 25 time units during the application of all stimulus segments of total length 100 time units. For such an example, data indicating how long the Power Arc remained satisfied is 0.25 (i.e., 25 divided by 100), and data indicating how many times the Power Arc was satisfied is 12.

(Karunaratne, [0074] in part).

Applicant submits that paragraph [0074] of Karunaratne only discloses computing a value representing a percentage of time where a Power Arc is satisfied. Karunaratne does not disclose determining an update granularity of power data nor does Karunaratne disclose dividing the update granularity of the power data by a time period.

The Office has acknowledged that Potega fails to disclose "dividing the update granularity of the power data by the time period" (11/16/2006 Office Action, p. 5).

Culbert only discloses a method and apparatus for anticipatory power management for low power data. Culbert does not teach or suggest determining a systematic error of power data, supplied to an operating system by a battery, used for identifying an amount of power used by a system running an application by determining an update granularity of the power data and dividing the update granularity of the power data by the first time period, and generating an indication to a user if the systematic error exceeds a predetermined value.

Thelander only discloses monitoring and synchronization of power use of computers in a network. Thelander does not teach or suggest determining a systematic error of power data, supplied to an operating system by a battery, used for identifying an amount of power used by a system running an application by determining an update granularity of the power data and dividing the update granularity of the power data by the first time period, and generating an indication to a user if the systematic error exceeds a predetermined value.

In contrast, claim 37 states

> A method for managing power data, comprising:
> determining a systematic error of power data, supplied to an operating system by a battery, used for identifying an amount of power used by a system running an application by determining an update granularity of the power data and dividing the update granularity of the power data by the first time period; and
> generating an indication to a user if the systematic error exceeds a predetermined value.

(Claim 37) (Emphasis Added).

In view of the amendments set forth herein, it is respectfully submitted that the applicable rejections and have been overcome. Accordingly, it is respectfully submitted that claims 1-6, 12-15, 17-20, 24-28, and 31-38 should be found to be in condition for allowance.

The Examiner is invited to telephone Applicant's attorney (217-377-2500) to facilitate prosecution of this application.

If any additional fee is required, please charge Deposit Account No. 50-1624.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30th day of January, 2007.

Shellie Bailey